CROSS REFERENCE TO RELATED APPLICATION

This application is a divisional of and claims priority to U.S. application No. 10/126,914, filed April 19, 2002, entitled "System and Method for Coupling and Redirecting Optical Energy Between Two Optical Waveguides Oriented at a Predetermined Angle," the entire contents of which are incorporated by reference. ~~The present application claims priority to provisional patent application entitled "Right Angle Fiber Optic Cable Adapter," filed April 20, 2001 and assigned U.S. Application Serial No. 60/285,273. The entire contents of this provisional application are hereby incorporated by reference.~~

In the Claims

Please cancel Claims 1-12 before calculating the filing fee in the above-styled patent application. Please keep Claims 13-17 pending and also add the following claims:

Pending Claims:

Claims 1 -12 (Cancelled).

13. (Original) A method for coupling and redirecting optical energy between two optical waveguides oriented at a predetermined angle relative to each other, comprising the steps of:

receiving optical energy from a first optical waveguide (1520);

expanding the received optical energy into a collimated beam of optical energy with a first aspherical lens (1525);

propagating the collimated beam towards a reflecting device (1530);

redirecting the collimated beam with the reflecting device at a predetermined angle (1535);

focusing the reflected and collimated beam to a size appropriate for a second optical waveguide with a second aspherical lens (1540); and

propagating the focused optical energy away from the housing in the second optical waveguide (1545).

14. (Original) The method of claim 13, further comprising the steps of:

forming a liquid impervious and heat tolerant optical coupler by:

attaching the first optical waveguide to a first connector (1505);

attaching the second optical waveguide to second connector (1505);

attaching the first and second connectors to a housing (1507);

attaching a first cover to the housing (1510); and

attaching a second cover to the housing (1515).

15. (Original) The method of claim 13, further comprising the steps of:

forming a liquid impervious and heat tolerant optical coupler by:

coupling first and second connectors to a housing (1505);

snapping a first cover to the housing (1510); and

snapping a second cover to the housing (1515).

16. (Original) The method of claim 13, wherein the step of redirecting the collimated beam with the reflecting device at a predetermined angle further comprises redirecting the collimated beam with a mirror.

17. (Original) The method of claim 13, wherein the step of redirecting the collimated beam with the reflecting device at a predetermined angle further comprises redirecting the collimated beam at an angle comprising approximately ninety degrees.

18. (New) A method for redirecting optical energy between two optical waveguides, comprising:

collimating a beam of optical energy from a first optical waveguide with a first aspherical lens;

directing the beam towards a reflector;

changing direction of the beam with the reflector at a predetermined angle;

sizing the beam with a second aspherical lens to a size appropriate for a second optical waveguide; and

directing the beam away from the second aspherical lens in the second optical waveguide.

19. (New) The method of claim 18, further comprising:

forming a liquid impervious and heat tolerant optical coupler by attaching the first optical waveguide to a first connector and attaching the second optical waveguide to a second connector.

20. (New) The method of claim 19, further comprising:

attaching the first and second connectors to a housing;

attaching a first cover supporting the reflector to the housing; and

attaching a second cover to the housing.

21. (New) The method of claim 18, wherein changing the direction of the beam with the reflector at a predetermined angle further comprises changing the direction of the beam with a mirror.

22. (New) The method of claim 18, wherein changing the direction of the beam with the reflector at a predetermined angle further comprises changing the direction of the beam with a mirror that comprises a reflectivity of less than one-hundred percent.

23. (New) The method of claim 18, wherein changing the direction of the beam with the reflector at a predetermined angle further comprises changing the direction of the beam with a mirror that comprises at least one reflective side.

24. (New) The method of claim 18, wherein changing direction of the beam with the reflector at a predetermined angle further comprises redirecting the beam at an angle comprising approximately ninety degrees.